

# EUROPEAN PATENT OFFICE

## Patent Abstracts of Japan

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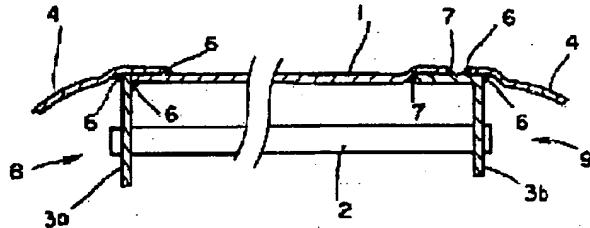
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APPLICANT : USUI INTERNATL IND CO LTD;

INVENTOR : TAKIGAWA KAZUYOSHI;

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TITLE : EGR GAS COOLER AND ITS  
MANUFACTURE



ABSTRACT : PROBLEM TO BE SOLVED: To prevent a fatigue damage of a heat transfer tube group by suppressing a residual stress when brazed as fast as possible.

SOLUTION: This EGR gas cooler comprises a heat transfer tube group 2 fixedly arranged on a tube sheet fixed to the vicinity of both ends of an inner wall of a body tube 1 having a cooling medium inlet and a cooling medium outlet at both ends, and EGR gas inlet and outlet 9 provided at an end cap 4. In this case, a heat resistant resin adhesive 7 is used to fix at least one of the sheet and the cap 4 of components provided at the EGR gas outlet side (low temperature side) to at least one of the transfer tube and the body tube.

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